Notice of Allowability	Application No. 09/801,302	Applicant(s) KELLY ET AL.	
	Celine X Qian	1636	
	The MAILING DATE of this communication Il claims being allowable, PROSECUTION ON THE MERI erewith (or previously mailed), a Notice of Allowance (PTO OTICE OF ALLOWABILITY IS NOT A GRANT OF PATE the Office or upon petition by the applicant. See 37 CFR	ITS IS (OR REMAINS) CLOSED II DL-85) or other appropriate comm ENT RIGHTS. This application is:	n this application. It not included unication will be mailed in due cou
. $igspace$ This communication is responsive to <u>the amendment</u>	<u>t filed on11/5/03</u> .		
. $igtimes$ The allowed claim(s) is/are <u>2-11 and 13-16</u> .			
☐ The drawings filed on are accepted by the Ex	aminer.		
. ☐ Acknowledgment is made of a claim for foreign prically a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the priority document International Bureau (PCT Rule 17.2(a)) * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING Inoted below. Failure to timely comply will result in ABAN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. ☐ A SUBSTITUTE OATH OR DECLARATION must be INFORMAL PATENT APPLICATION (PTO-152) while the priority document is a priority document in the priority document in th	ts have been received. Its have been received in Application of this communication to file and the properties of this application. It is have been received in Application to file application.	on No d in this national stage application e a reply complying with the requir AMINER'S AMENDMENT or NOT	rements
3. CORRECTED DRAWINGS (as "replacement sheets			
(a) ☐ including changes required by the Notice of Dra		w (PTO-948) attached	
 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Exa Paper No./Mail Date 	miner's Amendment / Comment o		
Identifying indicia such as the application number (see 37	CFR 1.84(c)) should be written on t	ne grawings in the front (not the ba FR 1.121(d).	ick) of
each sheet. Replacement sheet(s) should be labeled as su	Ich ill the header according to are		

5. Notice of Informal Patent Application (PTO-152)

8.

Examiner's Statement of Reasons for Allowance

6. Interview Summary (PTO-413),

Paper No./Mail Date 7. X Examiner's Amendment/Comment

9. 🔲 Other ____

Attachment(s)

1. Notice of References Cited (PTO-892)

Paper No./Mail Date

of Biological Material

2.
Notice of Draftperson's Patent Drawing Review (PTO-948)

4.

Examiner's Comment Regarding Requirement for Deposit

3. \square Information Disclosure Statements (PTO-1449 or PTO/SB/08),

Application/Control Number: 09/801,302

Art Unit: 1636

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's representative Irina Vainberg on 7/1/04.

The application has been amended as follows:

Claim 3. A method for transducing <u>hematopoietic</u> stem cells with a vector particle containing a gene of interest, which method comprises contacting target <u>hematopoietic</u> stem cells with vector particles pseudotyped with feline endogenous virus RD114 envelope protein and containing a gene of interest, wherein the vector particles are substantially free of factors that induce <u>hematopoietic</u> stem cell differentiation by being free of producer cells and producer supernatant to the extent that the amount of these differentiation-inducing factors is too low to cause the <u>hematopoietic</u> stem cells to differentiate, proliferate, or die, and whereby the transduced <u>hematopoietic</u> stem cells are capable of expressing the gene of interest and repopulating cell lineages when transplanted into a host.

Claim 10. The method of claim 3 wherein the target <u>hematopoietic</u> stem cells are prestimulated.

Claim 11. The method of claim 10, wherein the target <u>hematopoietic</u> stem cells are stimulated by treatment with signaling molecules selected from the group consisting of cytokines, growth factors and phytohemagglutinin.

Application/Control Number: 09/801,302

Art Unit: 1636

Claim 13. The method of claim [12] 3, wherein the target hematopoietic stem cells are obtained from the group selected from [the group consisting of] cord blood cells, mobilized peripheral blood cells, bone marrow cells, and liver.

Claim 15. The method according to claim 2, wherein upon engraftment of the transduced hematopoietic stem cells contacted one time with the retroviral particles into a host, greater than 10% of the transduced cells express the gene of interest.

Claims 12, 17-20 (cancelled)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Celine X Qian whose telephone number is 571-272-0777. The examiner can normally be reached on 9:30-6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel Ph.D. can be reached on 571-272-0781. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Celine Qian, Ph.D.

Anne-Marie Falk, PH. L.
PRIMARY FXAMINER